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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

EDWARDS, LAURA ESTELLE

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/650,498

Applicant(s)

SUITOR ET AL.

Examiner

Laura Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,17,18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,17,18 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 4 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Allowable Subject Matter

The indicated allowability of subject matter as set forth in original claims 2-4, 6, 8, 18-20, and 24 is withdrawn in view of the newly discovered prior art. Rejections based on the newly cited reference(s) follow.

Claim Objections

Claims 4 and 20 are objected to because of the following informalities: claim 4 should depend from claim 1 and not cancelled claim 3. Also, claim 20 should depend from claim 17 and not cancelled claim 19. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 1, 2, 4, 8, 17, 18, 20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) in view of Ferri, Jr. (US 6,085,940).

Ruuttu et al teach an apparatus for coating a workpiece with a coating solution comprising a coating chamber in which the workpiece is coated, a coating solution supply container for supplying the coating solution to the coating chamber, a fluid connection fluidly connecting the coating chamber and the coating solution supply container such that coating solution is flowable between the coating chamber and the coating solution supply container wherein the container is positionable to different elevations allowing coating solution to flow from the supply container to the coating chamber and vice versa, from the coating chamber back to the supply container. Ruuttu et al fail to teach the use of a deformable or collapsible bladder type coating solution supply container. However, Ferri, Jr. recognizes a deformable or collapsible bladder based chemical dispensing supply system that dispenses chemical from a source or drum directly to a process area without the need of a pumping system (see col. 1, lines 4-6 and col. 5, lines 44-60). It would have been obvious to one of ordinary skill in the art to provide the deformable or collapsible bladder dispensing supply system as taught by Ferri, Jr. in place of the compressed gas supplied coating solution supply container(s) of Ruuttu et al in order to supply coating solution directly to the coating chamber without the need of a compressed air supply source.

With respect to claim 2, the deformable or collapsible bladder type system as set forth by Ferri Jr. is deemed capable of being manually manipulated because the supply system is flexible and non-rigid so as to be collapsible.

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With respect to claim 4, the apparatus as defined by the combination above results in an apparatus having a supply system mounted for movement between an upper and lower elevation.

With respect to claim 8, the Ruuttu et al apparatus includes a valving mechanism (15) that enables coating fluid to flow from the coating chamber back in the direction to the supply container.

Claims 1, 2, 4, 8, 17, 18, 20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) in view of Hewett (US 6,039,214).

Ruuttu et al teach an apparatus for coating a workpiece with a coating solution comprising a coating chamber in which the workpiece is coated, a coating solution supply container for supplying the coating solution to the coating chamber, a fluid connection fluidly connecting the coating chamber and the coating solution supply container such that coating solution is flowable between the coating chamber and the coating solution supply container wherein the container is positionable to different elevations allowing coating solution to flow from the supply container to the coating chamber and vice versa, from the coating chamber back to the supply container. Ruuttu et al fail to teach the use of a deformable or collapsible type coating solution supply container. However, Hewett recognizes a deformable or collapsible bag based dispensing system that dispenses solvent based coating material from a bag, on a small scale, and prevents air from negatively affecting volatile components of the coating material (see col. 1, lines 16-19 and lines 28-31). It would have been obvious to one of ordinary skill in the art to provide the deformable or collapsible bag dispensing system as taught by Hewett in place of the coating solution supply container(s) of Ruuttu et al in order to supply coating solution to the

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coating chamber on a small bench size scale without drying out the coating material due to exposure to air.

With respect to claim 2, the deformable or collapsible bag type system as set forth by Hewett is deemed capable of being manually manipulated because the bag is flexible and non-rigid so as to be collapsible.

With respect to claim 4, the apparatus as defined by the combination above results in an apparatus having a supply system mounted for movement between an upper and lower elevation.

With respect to claim 8, the Ruuttu et al apparatus includes a valving mechanism (15) that enables coating fluid to flow from the coating chamber back in the direction to the supply container.

Claims 5, 7, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) and Hewett (US 6,039,214) as applied to claims 1, 2, 4, 8, 17, 18, 20, and 24 above, and further in view of Cranskens et al (US 3,296,951).

The teachings of Ruuttu et al and Hewett have been mentioned above. Even though Hewett further recognizes controlling the flow of coating material out of the bag via use of a flow control means including a plate and clamping means (see col. 4, lines 53-60), neither Ruuttu et al or Hewett teach or suggest a mechanism (i.e., plate) for deforming the supply container or bag to move the coating material to the coating chamber and which permits coating material to flow back to the coating supply container or bag. However, it was known in the art, at the time the invention was made, to use a plate to apply pressure to a collapsible or deformable supply bag to supply coating material to a coating chamber and the release of the plate to relieve

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pressure to enable coating material to flow back into the coating material supply bag as evidenced by Cranskens et al (US 3,296,951). In light of the teachings of Cranskens, it would have been obvious to one of ordinary skill in the art to provide, on a small scale, a pressure supply/release plate in communication with the bag in the coating apparatus defined by the combination above in order to enable supply and removal of coating from material from the coating chamber.

Claims 5, 6, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruuttu et al (WO 01/38005) and Hewett (US 6,039,214) as applied to claims 1, 2, 4, 8, 17, 18, 20, and 24 above, and further in view of Thorsheim (US 4, 258,862).

The teachings of Ruuttu et al and Hewett have been mentioned above. Even though Hewett further recognizes controlling the flow of coating material out of the bag via use of a flow control means including a plate and clamping means (see col. 4, lines 53-60), neither Ruuttu et al or Hewett teach or suggest a mechanism (i.e., fluid pressure based) for deforming the supply container or bag for deforming the supply container or bag to move the coating material to the coating chamber and which permits coating material to flow back to the coating supply container or bag. However, it was known in the art, at the time the invention was made, to provide a collapsible or deformable bag within a housing to which fluid pressure was applied to supply coating material to a coating chamber as evidenced by Thorsheim. In light of the teachings of Thorsheim, it would have been obvious to one of ordinary skill in the art to provide, on a small scale, a fluid pressure supply/release arrangement in communication with the bag in the coating

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apparatus defined by the combination above in order to enable supply and removal of coating from material from the coating chamber.

Response to Arguments


Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura Edwards
Primary Examiner
Art Unit 1734

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May 11, 2005